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Remarks

In view of the above amendments to the claims and the following discussion, the applicants submit that none of the claims now pending in the application are anticipated under the provisions of 35 U. S. C. § 102. Thus, the applicants believe that all of these claims are in allowable form.

REJECTIONS

A. 35 U. S. C. § 102

1. Claims 1-2 and 6-10 are not anticipated by Lee

Claims 1-2 and 6-10 stand rejected under 35 U. S. C. § 102(b) as being anticipated by Lee (U. S. Patent 5,825,746 issued October 20, 1998). The applicants submit that these claims are not anticipated by this reference.

Claim 1 is directed to a turntable for a drive for storage media in disc form, with a bore for receiving a motor shaft of a drive motor. The bore is "intended to be permanently fixed to said motor shaft" (see, FIG. 1 and the specification at page 8, lines 4-6). The diameter of the bore is greater, at least in a partial region of the bore, than the diameter of the motor shaft, so that there is a gap between the wall of the bore and the motor shaft and an inclination and/or a position of the turntable is adjustable in relation to an axis of rotation of the motor shaft (see, FIG. 1 and the specification at page 8, lines 6-22).

With regard to claim 1, Lee discloses a turntable (23) for a drive for storage media in disc form, with a bore (opening of 232) for receiving a motor shaft (22') of a drive motor (22) and intended to be permanently fixed to said motor shaft (22').

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Contrary to the present invention, the diameter of the bore is smaller than the diameter of the motor shaft, so that there is no gap between the wall of the bore and the motor shaft. It is thus not possible to adjust an inclination and/or a lateral position of the turntable in relation to an axis of rotation of the motor shaft.

In the Office Action, the Examiner equates the central opening in element 27 (a ring) with the bore. The ring clearly is not intended to receive a motor shaft, as it is not even supposed to have any contact with the motor shaft. In any case, the ring is in no way "intended to be permanently fixed to said motor shaft".

Therefore, claim 1 as amended is new over Lee.

Furthermore, with regard to claim 6 Lee discloses a turntable (23, 26) for a drive for storage media in disc form, with a bore (opening of 232) for receiving a motor shaft (22') of a drive motor (22), wherein the turntable (23, 26) comprises at least a first part (23) mounted on the motor shaft (22'), which is fixed in relation to an axis of rotation of the motor shaft (22'), and a second part (26), whose position in relation to the axis of rotation of the motor shaft (22') is adjustable, the first part (23) and the second part (26) being arranged such that there is a gap between the first part (23) and the second part (26).

As the element 26 is moved during operation of the disc drive, it is not intended to be permanently fixed to said motor shaft and/or said first part.

Therefore, also claim 6 is new over Lee.

With regard to claim 7, the turntable disclosed by Lee is produced by simply introducing the motor shaft (22') into the bore (opening of 232) and then assembling the remaining parts. As indicated in Lee at column 4, lines 13-15, the turntable (23) is fixedly attached to the shaft (22') of the motor (22). This is apparently done by press fitting, as described in the present application. There is no possibility to adjust the inclination and/or lateral position of the turntable (23) before permanently fixing the turntable (23) to the motor shaft (22'). If, however, the ring (27) is considered to constitute the adjustable part, then this ring (27) is under no circumstances permanently fixed to the motor shaft (22'), as it needs to be movable during operation of the disc drive. Therefore, depending on the

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interpretation of the embodiment shown by Lee at least either the step of adjusting or the step of permanently fixing is not disclosed. Therefore, claim 7 is new over Lee.

Concerning claim 8, when the central ring (26) is considered to constitute the second part, this ring (27) is under no circumstances permanently fixed to the motor shaft (22') and/or to the first part (the turntable 23), as it needs to be movable during operation of the disc drive. Consequently, also claim 8 is new over Lee.

Claims 2 and 9-10 depend directly, or indirectly from claim 1 or 6, respectively. For the same reasons as stated above for claims 1 and 6, claims 2 and 9-10 are also patentable over Lee.

2. Claims 1-5 and 7 are not anticipated by Matsushima

Claims 1-5 and 7 stand rejected under 35 U. S. C. § 102(b) as being anticipated by Matsushima (U. S. Patent 6,005,311 issued December 21, 1999). The applicants submit that these claims are not anticipated by this reference.

Claim 1 is directed to a turntable for a drive for storage media in disc form, with a bore for receiving a motor shaft of a drive motor. The bore is "intended to be permanently fixed to said motor shaft" (see, FIG. 1 and the specification at page 8, lines 4-6). The diameter of the bore is greater, at least in a partial region of the bore, than the diameter of the motor shaft, so that there is a gap between the wall of the bore and the motor shaft and an inclination and/or a position of the turntable is adjustable in relation to an axis of rotation of the motor shaft (see, FIG. 1 and the specification at page 8, lines 6-22).

With regard to claim 1, Matsushima discloses a turntable (9) for a drive for storage media in disc form, with a bore (opening of turntable 9) for receiving a motor shaft (6) of a drive motor and intended to be permanently fixed to said motor shaft (6), wherein the diameter of the bore is greater, at least in a partial

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region of the bore, than the diameter of the motor shaft, so that there is a gap between the wall of the bore and the motor shaft.

As indicated by the Examiner, the gap only exists at the bottom and at the top of the bore. As a consequence, contrary to the Examiner's assertion neither the inclination nor the lateral position of the turntable is adjustable in relation to an axis of rotation of the motor shaft. It is clearly indicated in Matsushima at column 3, lines 10-13, that the motor shaft (6) is press-fitted in the central hole of the turntable (9). Due to the press-fitting the turntable is already permanently fixed to the motor shaft. The press-fitting does not allow for any adjustment of the lateral position or the inclination of the turntable. Therefore, claim 1 is new over Matsushima.

Furthermore, the turntable disclosed by Matsushima is produced by simply introducing the motor shaft (6) into the bore (central opening of the turntable 9). As already indicated above, the motor shaft (6) is press-fitted in the central hole of the turntable (9). There is no possibility to adjust the inclination and/or lateral position of the turntable (9) before permanently fixing the turntable (9) to the motor shaft (6). Therefore, the step of adjusting is not disclosed and claim 7 is thus new over Matsushima.

Claims 2-5 depend directly, or indirectly from claim 1. For the same reasons as stated above for claim 1, claims 2-5 and are also patentable over Matsushima

CONCLUSION

The solutions according to the present invention solve the problem of tilt adjustment and/or manufacturing tolerances of the bore. In many cases the tilt or a de-centering of the turntable is caused by manufacturing tolerances of the turntable, and not by a tilt or positional error of the motor shaft. In such cases it is possible to compensate for these tolerances by making the diameter of the bore greater than the diameter of the motor shaft at least in a partial region of the

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bore. The motor shaft is deemed to constitute a reference for adjustment. In contrast, both Lee and Matsushima rely on the assumption that the bore does not have any relevant manufacturing tolerances. The bore is in fact smaller than the diameter of the motor shaft and the turntable is secured to the motor shaft by press-fitting (also known as interference-fitting).

None of the cited references gives any hint to make the diameter of the bore greater, at least in a partial region of the bore, than the diameter of the motor shaft, so that there is a gap between the wall of the bore and the motor shaft and an inclination and/or a lateral position of the turntable is adjustable in relation to an axis of rotation of the motor shaft.

Thus, the applicants submit that none of the claims now pending in the application are anticipated under the provisions of 35 U. S. C. § 102. Consequently, the applicants believe that all of the claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Ms. Patricia A. Verlangieri, at (609) 734-6867, so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,


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